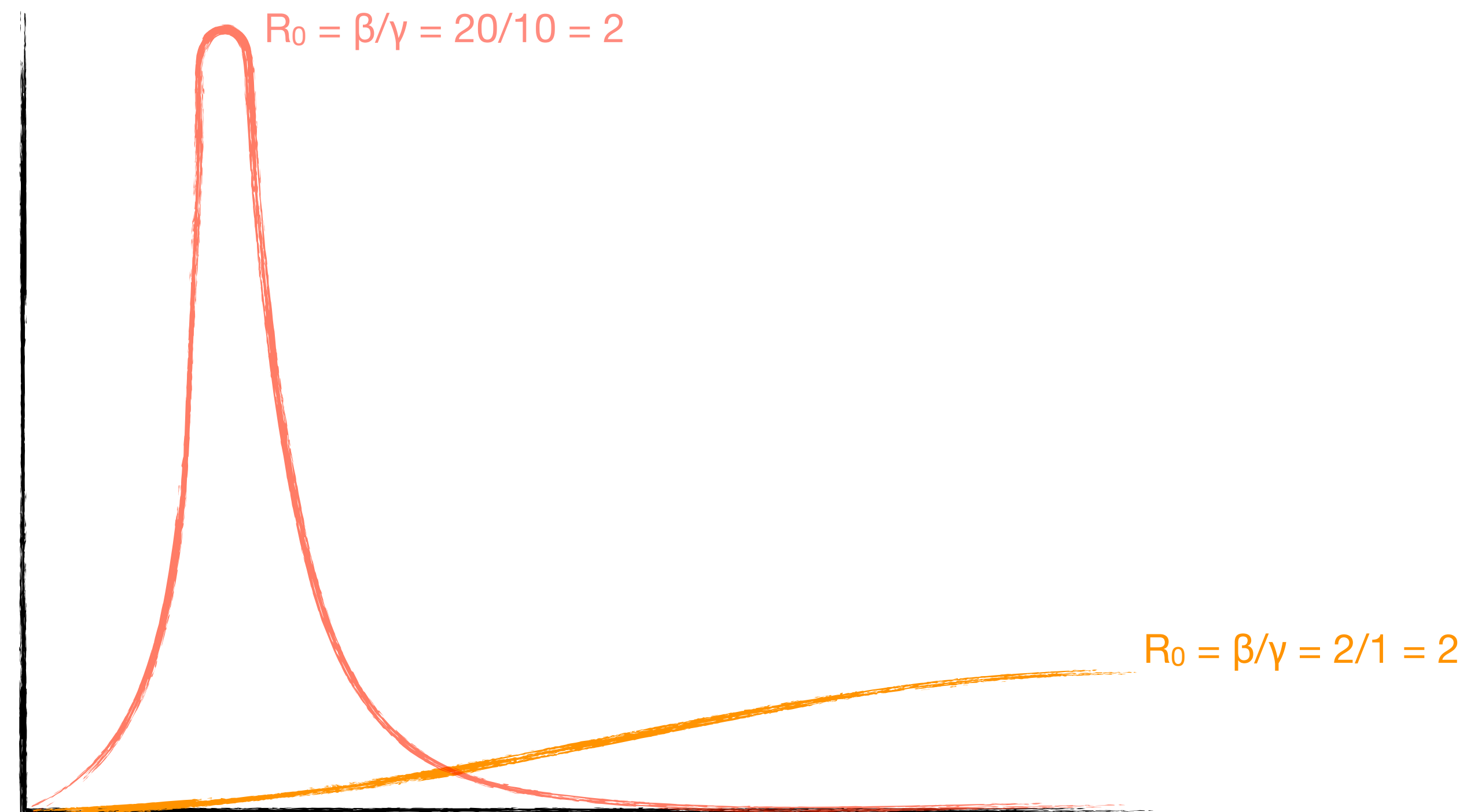


What can we infer about epidemics from the SIR model?

The generation interval

R_0 doesn't tell us everything we need to know about the dynamics of an epidemic...



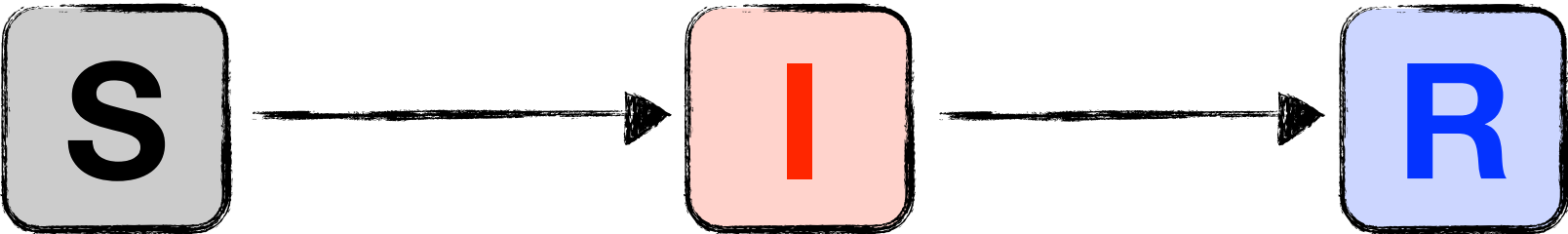
We need to know something too about the speed at which those new infections are produced!

The time between the start of one infection and the start of a secondary infection that it has caused is the **generation interval**.

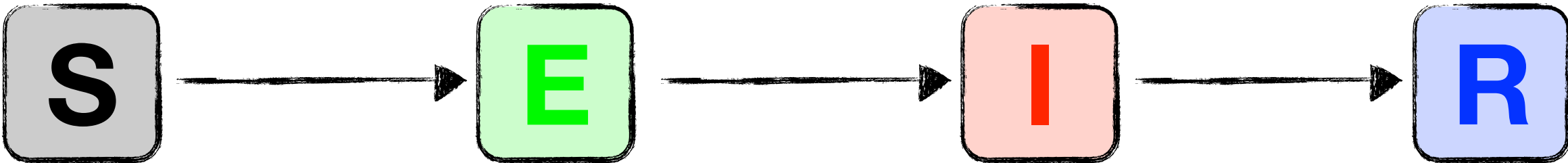
How can we extend the SIR model?

More complex disease stages

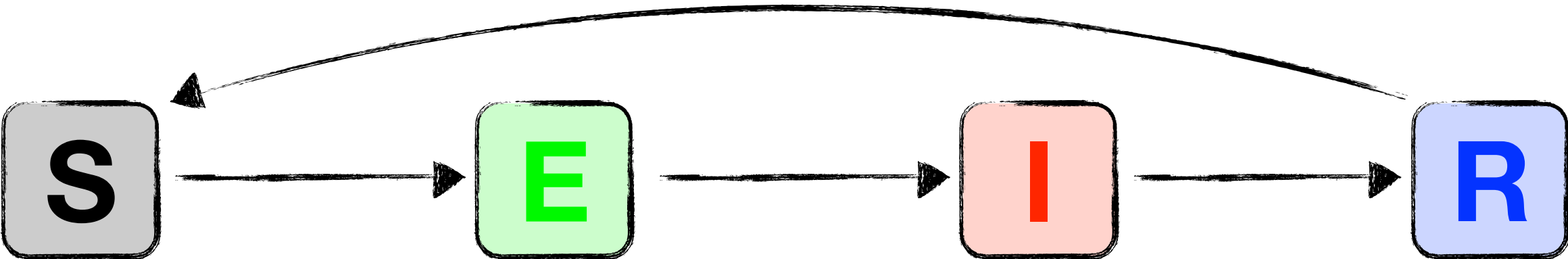
Standard model



Exposed state



Waning immunity



Age groups,
multiple disease states...

